# INDIANS
# AT WORK

DECEMBER 1, 1933.

AN EMERGENCY CONSERVATION
NEWS SHEET FOR OURSELVES

BUREAU OF INDIAN AFFAIRS
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# I N D I A N S  A T  W O R K

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The Indians are upon a long journey. A long labor, too. The goal is far ahead. Victory is merely possible. The possibility--nay, the probability--of racial extinction is still a fact.

The probability of racial extinction. An old journey (it began twenty thousand years ago), whose last stages have been traversed in gloom, can yet end in a nothingness. The Indian can become only a memory.

Racial salvation for the Indians is a possibility. And that possibility is enough. The greatest efforts of the human spirit and will have been efforts in the pursuit of the improbable but the possible. Possibility is enough.

On what does the answer depend?

It depends upon the Indians. And only on them. The Indians will decide.

The Government can remove obstacles. It must do so. It can extend material aid-at the utmost, a small fraction of the material aid which the Indians (if they are to win) must supply to themselves through their individual and group effort, sacrifice and faith. The Government cannot do the decisive part. It ought

to be this way, and it is. No people which must depend on a government to save it can be saved at all.

The months behind us have seemed crowded with events and actions for and by the Indians. These months have furnished real results - real evidence of the actual, near-at-hand possibiligy of racial salvation for the Indians. But seen in the perspective of what must be done, these months are the barest beginning. Nothing has been established, nothing assured, nothing settled yet.

Why are these thoughts brought forward right now? Because hope has been running high. It must be only a foundation-stone for the edifice of hope which has slowly to be built up, and because pain and confusion still rest upon the majority of the Indians. And it is possible that the high-water mark of Government aid (on the material side) to the Indians has been reached and will soon be passed. The Congress about to begin probably will do those things which, to the Indians and their friends, seem urgent and tragically indispensable. But there is no assurance of this fact. The state of the country is profoundly uncertain at this moment, and promises would be delusive.

Enduring courage is needed. And among the Indians, where hundreds are now aware of the crisis - of the supreme possibilities - thousands must become aware; and the awareness must become organized for sustained action on the slow-beating wings of that old courage which never failed the Indians in the long past.

What, practically, is needed?

That the allotted Indians shall understand their own situation, and shall be willing to make sacrifices - surender, sometimes, of personal advantages not merely illusory but genuine - in order that their families, their children, their tribes may recapture land, may recapture power, may live into the future. Let Indians - the disinherited allotted Indians - dismiss from their minds any idea that it is merely Government action, Government money, which will reestablish them upon their lost or vanishing lands. Some Government action and some Government money there must be - but the result, if it be attained (and it can and must be attained) will represent fifty units of Indian effort and Indian contribution for every one unit of Government assistance. Indians and friends of the Indians, let this fact sink home. It is truth.

And it is needed that the Indians in their tribal groupings shall vigorously - clear-mindedly and experimentally - attack the problem of their own organization - their political, civil, cultural and industrial organization. They are now free to attack this problem. The official arm will try to help them. But the issue lies with themselves first, last, and here and now.

And it is needed that the Indians shall know their own material resources. Even now there are 25,000,000 acres of land owned by Indians as tribes; and there are many other assets, needless to list

here. To know what their estate is -- to know how it may be developed -- to know how it may be conserved and perpetuated -- and to act cooperatively to these ends: this is now the opportunity, as it is the hope, of the tribes. The Navajos have gallantly led the way, in their recent undertaking to regulate their own range (at a good deal of voluntary sacrifice and of shock to precedent) as the means toward improving their land and toward putting an end to soil erosion. But for the Navajos, like all the Indians, it is a long journey which is ahead. Victory for the Navajos, also, is not a certainty -- perhaps not a probability even, but only a live possibility. That is enough for them. They are acting -- they are en marche.

JOHN COLLIER,

Commissioner of Indian Affairs

## EMPLOYMENT UNDER THE CIVIL WORKS ADMINISTRATION

On November 7, 1933, the President created the Federal Civil Works Administration, its purpose being "to provide regular work on public works at regular wages for unemployed persons able and willing to work". Mr. Harry L. Hopkins was appointed Administrator.

On November 23 Civil Works Circular Letter Number 1 was sent out from the Indian Office. It is quoted in part below:

To all Superintendents:

The Federal Civil Works Administration has approved the employment on Indian reservations of approximately 4,500 persons including men and women qualified for supervisory work, clerical work, skilled and common labor, for useful needed work of all types to be begun immediately and completed by February 15....Workers may be rotated if necessary, particularly in the laboring positions. Clerical assistants are covered under supervisory or skilled employees.

Funds for the payment of salaries and costs of material, equipment, and tools needed in the work will not be actually transferred to the various jurisdictions. Instead the State Civil Works Administration will furnish each superintendent with blank checks and will deputize the agency disbursing officer to sign the checks, payment being made from the money allocated by the Federal Civil Works Administration to the State Civil Works Office. No fixed sum is allocated to the Indian Service but an amount is held in reserve by the Federal Civil Works Administration sufficient to pay the personnel authorized by that Administration and the amount authorized for materials..

In selecting the work a wide choice is left with each superintendent. The money should be expended to distribute the benefits as widely as possible. It is desired particularly that as much work be furnished as possible for women who are depending upon themselves for support. In addition to such ordinary occupations as will suggest themselves to the superintendents, it is possible that a number may be employed in garment making, quilt making and similar work, materials being purchased from the Civil Works allotment. The finished articles should be distributed to needy Indians.

Work may be done on Government land, tribal land, and on individual allotments held in trust, or on

privately owned land if for general welfare. Repair work on Indian homes, digging of wells, construction of sanitary privies, are all permissible on tribal and trust lands.

Various types of work suggested are as follows:

1. Repair work and painting Government buildings and tribal buildings, including employees quarters, schools, hospitals.

2. Similar work on individually-owned Indian homes.

3. Erection of small Indian homes to furnish decent living quarters for Indians now in tents, tepees and squalid frame and mud buildings.

4. Construction of sanitary privies for Indian homes.

5. Digging of wells for individual and group use, making domestic water available without the present long hauls.

6. Construction of Indian community and chapter houses.

7. Building homes near the agencies for old, indigent Indians.

8. Getting out logs and stone and making adobe for future buildings to be needed by the Government or by the Indians.

9. Erection of sheds to house tractors, trucks, road machinery, etc.

10. Erection of sheds for stock shelter.

11. Cutting local timber for fuel, fence posts, telephone posts, bridge timber, etc.

12. Employment of women in garment making, dresses, shirts, overalls, etc., and in making quilts, blankets, moccasins, etc.

13. Clerical work for Indian men and women trained in Government and other schools and for others, to bring agency records up to date.

14. General clean-up work around Indian communities and agency headquarters.

15. Providing for the development of recreational centers.

16. Clearing land for community and subsistence gardens.

17. Road work, sewerage, drainage, etc.

Other jobs may suggest themselves to you. As soon as the work is under way send a report to this Office giving the projects being undertaken. If your needs warrant a larger personnel submit your recommendation with justification without delay.

John Collier,
Commissioner.

# COMMUNITY DAY SCHOOLS FOR INDIANS

By W. Carson Ryan, Jr.

Director of Education, Indian Service

Community day schools, in close touch with the life of Indian people, constitute the present emphasis in Indian education, and all important developments recently have been in this direction. Drastic reductions in the operating budget, coupled with a timely release of funds for the construction of schools and roads under the Public Works Administration, have speeded up our day school program to an extent hardly considered possible a year ago. Between fifty and sixty community day schools are to be built in the Navajo country alone this year, fourteen of them of high school grade. By June 30, 1933 the elimination of pupils from some boarding schools and the reduction of enrollments in others had brought about a decrease of approximately 2,000 pupils in these schools as compared with the year before, and the program adopted beforo July 1, 1933 provided for a still further reduction of over 3,000 in the boarding school enrollment in the present autumn. The boarding school totals by calendar years are as follows: 1931-32, 21,677; 1932-33, 19,728; 1933-34 (as of October 31) 16,044; 1934-35 (ostimated) 13,660. The increase in day school and public school attendance more than compensates for the boarding school reduction.

## The Results Of The Program So Far

It is generally admitted that success has attended the move to place Indian children back in their own homes, instead of caring for them on a dependency basis in institutions. Attendance in most places has been high and the children have been coming to school clean, happy and generally in good physical condition. This successful outcome of what some observers considered a dangerous experiment has been materially assisted by the staff of well-equipped social workers in the Indian

Service whose members have now increased to seventeen. These social workers, or "visiting teachers", as they are sometimes called, have helped the Indian parents to adjust with minimum difficulty to the new responsibility of caring for their own children. Even in cases where the change from boarding school to local school attendance was made with little or no preparation, and sometimes in the face of indifference or actual opposition on the part of those in charge, the Indian families have adapted themselves in a highly satisfactory way te the new conditions. It is recognized that fundamental constructive changes must be carried out in effecting the new program, and that only a beginning has been made. So far the chief values have been in reestablishing the integrity of the Indian home and the wholesome atmosphere of a normal family as the bases for Indian community life, much of which had been destroyed under the system of boarding schools for young children.

## The Next Steps

The next steps involve setting up a real community program, participated in from the start by the Indian people themselves, and with a closer tie-up between the schools and economic and social life. How the day schools are to carry on a more fundamental task than anything that has been done in the past is indicated in the following directions given to the architects in planning the new day school plants now under way.

1. The schools are to be community schools of the activity type, for the use of all members of the community, adults as well as children, and the buildings are to be adapted to local needs rather than conform to any conventional school plans. The simplest possible construction is to be used with local materials and Indian labor, not only for the usual reasons inherent in the Public Works program, but as part of the Indian participation in school and community work.

2. Even the smallest schools are to have a varied program. They are to be "one-teacher" rather than one-room schools--that is, there will be, in addition te the main "classroom", space for work shop, library, school lunch, washing (frequently for community washing and laundrying as well as for children's use) and other needs that will develop for both pupils and community.

3. In schools larger than one-teacher schools there is to be abundant space for shop work, crafts, science, agriculture, music, home economics, library, play and assembly facilities and such other school and community activities. A general community meeting place is to be assumed regardless of the size of the school.

4. The classrooms should provide an opportunity for freedom in arrangement of furniture and equipment. There should be cupboard and shelf space in the rear of the rooms not only for general supplies but also for materials on which the children are working. Space will need to be provided for reading tables, as well as for art work,and

(especially when no additional shop room can be provided) a work bench and tools suited to the children's level of development. All equipment, including desks, is to be of the modern non-rigid sort, and much of it can and should be made by the children themselves as part of their regular work.

5. In schools above the elementary grades (junior and senior high schools) the program will emphasize agriculture, industrial training, arts and crafts, rather than the conventional high school subjects, and the buildings should be planned accordingly, with less classroom space than is customary, and with more room for laboratories and work shops.

6. We have in mind, wherever possible, a school plant placed in a natural setting with sufficient land (10 to 40 acres) to make possible gardens, athletic fields, and other outdoor recreational opportunities. The land around the school plant should be left in such a way that planning of the gardens and landscaping can be done with help from the school children and the community.

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An interesting adult Indian educational program has been instituted at the Flandreau Indian School. The Indians have organized the Wakpaipaksan Club and the school has furnished a club room which is open to members until ten thirty at night. The club's educational and activity program is integrated with that of the school. Adult Indians may elect any course in the school, either day or night classes. Since the regular school program is outlined on a unit basis it is possible for them to select units of interest to them. Staff members are also available for talks and as discussion leaders.

Athletic and social facilities are programmed for the adults at such times as not to conflict with the school children's program. If they so desire, the members of the adult group have their competitive teams and social events sponsored by school officials.

The night school program has been quite successful in some respects. Men have made use of the school shops to gain knowledge and skill in the various trades taught at the school, such as auto mechanics, welding, carpentry, cabinet making, plumbing and so forth. In addition they are free to carry on hobbies of their own. Women, old as well as young, have interested themselves in home economics programs. Some younger people have taken commercial courses.

The success of the whole scheme centers around the Indian club idea and its democratic spirit. The administration attempts to encourage, but not to interfere. The activities of the club are the expression and the desires of the group, rather than a superimposed scheme of the authorities. We feel that the possibilities of this type of program have not been scratched. Byron J. Brophy, Superintendent.

## MEXICAN RURAL SCHOOLS AND OUR INDIAN PROGRAM

During November, a committee consisting of W. Carson Ryan, Jr., Director of Education for the Indian Service, A. C. Cooley, Director of Extension, and R. M. Tisinger, State Supervisor of Indian Education for Arizona, visited rural schools in several of the States of Mexico having large Indian populations -- particularly Hidalgo, Oaxaca, Morelos, and Tlaxcala. They reported to Commissioner Collier on November 24 as follows:

"We went to Mexico, you will recall, directly from the Navajo conference, believing that Mexico had something of value for our work in the Indian Service, especially in the Southwest. Our visit convinced us more than ever of the importance of the Mexican experience. We believe that what Mexico is doing in its rural schools is of tremendous significance, not only for Mexico and the rest of America, but for all the world. Mexico is almost the only country, so far as we can see, that has undertaken, on a national scale, an intelligent, comprehensive, well-planned program for the upbuilding and dignifying of rural life and people.

### With The Otomis In Hidalgo

"The Department officials had planned to have us see first the Otomi Indians as probably the most under-privileged in terms of economic and social need. Accordingly, we set out early Wednesday morning, November 8, in a car provided by the Department, for Pachuca, capital of Hidalgo.

"We were met at Oaxaca by Sr. Chimallo, head of Federal education for the State.

"The first visit Saturday morning was to the rural normal school at Cuilipan. This school has only recently been moved to its present site -- a beautiful old convent. The plant is being literally built and made over by the students themselves -- there is a tannery, shops, newly-constructed dormitories -- all the actual work of students and faculty. The students are all Indian -- many of them still using the language of their Zapoteca or Mixteca forefathers. Close to the school is a rural school where the students do their practice-teaching.

"At noon we returned to Oaxaca to visit the market. It had everything Gruening describes in his chapter on the markets and a few other special features -- there were fruits of the region, Oaxaca pottery, an immense array of toys and trinkets (whistles predominating in the form of farm animals and ancient religious figures), an incredible variety of locally made hats, hardware of the simplest and most practical sort, and a particularly complete native "drug store", made up of every conceivable herb known to the Indians.

## Famous Mitla

"Saturday afternoon we started for Mitla, stopping to view the enormous "Arbol del Tule" and visiting two Federal rural schools -- both unusually complete in their provision of teachers' quarters, rabbitries, showers, school gardens, and at one of the schools -- a nixtamal (corn mill) for the use of the community. In these, as in other schools we visited, there was a night attendance of adults usually equal to a third or half the children's attendance during the day. At Mitla the members of the school board met us and explained proudly what their school meant to them and how they had just been enlarging and improving it with their own labor.

"We spent two hours at the ruins of the archeological city of Mitla -- a valuable experience for any one interested in the innate capacities of people of the Indian race

"Early Sunday morning was set aside for a trip to Monte Alban, an archeological city still almost totally unexplored. Standing atop the comparatively insignificant tomb from which Caso took the marvellous collection of jewels less than two years ago, one can look over the vast valleys that from earliest times made this a place desirable enough to live in and fight over. The visitor interested in Indians finds much to think about when he sees at Monte Alban some of the remains of a Zapoteca-Mixteca civilization that itself probably combines two epochs, one, two thousand, the other three thousand years ago.

"At Pachuca the Director of Ed-

ucation for the State of Hidalgo took charge of us. We went first to Actopan, where we spent an hour at the market, looking at the farm products and other things brought in by the Indians from the surrounding country; thence to rural schools and community centers at several places, with stops at a sanatorio and a pulque making place near an abandoned hacienda; and returning to Actopan for an exploration of the old sixteenth century convent, until recently used as a school.

"From Actopan we went out to Mexe, an agricultural school started six years ago with a somewhat elaborate set-up, now under new management (Sr. Andrade in charge). This is one of the schools maintaining the four-fold "Institutes" -- agriculture, normal training, social welfare, and research. In the evening we accompanied members of the school staff to San Juan Tepe, where we saw a music school for adults being conducted in an old church, with two lone candles for light, and such animation on the faces of young campesinos -- who had been working twelve to fourteen hours in the fields during the day -- as we thought we had hardly ever seen anywhere before.

"We slept at the school and started out early the next morning, after visiting the school dairy, shops, and the new "nursery school", for a long tour of rural schools. Most of the ones we visited had two or more teachers, school gardens, chicken houses, rabbit warrens, outdoor basket-ball equipment, and open-air theatres -- the latter of every possible shape from the simplest to the most ornate. At a village school where we chanced to be at noon the teachers insisted on getting up a banquet for us, serving as the piece de resistance barbecued fish in huge maguey leaves. Some of the transportation difficulties of this area were brought home to us when, after bumping over roads just a shade worse than those on the way to Kayenta, Arizona, in our own Indian country, our cars got bogged in an irrigation ditch and delayed us an hour. At 5:30 we left for Mexico City, reaching there with just an hour to spare to get off by automobile to Puebla, where we were to spend the night on the way to the city and state of Oaxaca.

## The Indian State Oaxaca

"At 6:35 Friday morning we took the narrow-gauge train for Oaxaca, via Tehuican, accompanied by Sr. Benjamin Martinez of the Department of Education staff who proved to be a mine of information on things Indian, old and new. (He is himself of Indian blood, with experience in Yucatan and other Indian strongholds). The trip to Oaxaca takes the entire day by train; it gave us an opportunity to see hundreds of Indians along the way; to sample the many fruits and dishes of the region; to talk with friendly traveling companions; to ride for miles through one of the

wildest and most beautiful canyons in any country; and to read back numbers of "Mexican Folkways" and Simpson's recent report on the land question in Mexico -- considered the best summary of the situation to date (completed August 1, 1933).

The Importance Of The Mexican Experiment To Our Indians

Of the special importance of the Mexican experience for our Indians, particularly in the Southwest, there can be no doubt. Mexico is, in the first place, overwhelmingly Indian, and the record of what the Indian race can do under any and all circumstances is there to read. But the main point is that in its national rural school program Mexico is making a valiant effort to give rural people - rural Indians for the most part - a real opportunity. A Federal rural school in Mexico (there are now some nine thousand of them) is not a mere class-room school. Class-rooms there are, to be sure, but they are only a part - a comparatively small part - of the total educational program. The school plant itself indicates the variety of activities. There is a school garden; there are chicken houses, rabbit runs; one or more teachers' cottages. A playground with basket-ball equipment is nearly always in evidence; an open-air theater is one of the most prominent features; sometimes there is a mill for grinding the corn of the community. Some attempt at native art, ranging in merit from the frescoes of Riviera or Orozco down to the crudest efforts of local talent, is nearly always observable. Sometimes the plant includes a considerable community house, separate from the school, but in any case the adults

are found using the school quite as much as the children - a question as to the number attending school almost always brings the answer in terms of so many children during the day and so many adults at night.

## A Real Program

"The features just mentioned are not conceived of as extra at all; they are an integral part of the work of the school. The so-called "cultural mission", a technical staff of six or seven persons working out from a central school, includes well-equipped specialists who carry on the difficult and necessary task of in-service training - helping the teachers in these rural schools to do better the literally multitudinous duties they have - an educational man as general organizer, an agricultural man to help with the farming, a woman organizer for social work and home improvement, a doctor or nurse for health work, a recreation leader, and a "research" person. This constitutes a frontal attack on the chief weakness of rural schools nearly everywhere - a systematic effort at a thoroughly prepared rural school teaching force.

"Obviously the kind of rural school Mexico is now setting up so numerously is the only institution that will ever succeed in making education a real driving force in rural life - economically, socially, esthetically. It is the kind of a school educators and others in the United States have dreamed of and talked about for many years - achieved here and there elsewhere in individual in-

stances, perhaps, but never hitherto accepted and put into effect as an integral program for mass education in rural areas.

"It seems to us particularly important, in view of the present expanding activities in parts of the Indian Service, our changing land policies and the developmental programs accompanying it, that as many as possible of our people in the Indian Service see this work in Mexico, not, of course, for the purpose of imitating in detail what is actually done there, but rather for the purpose of understanding and applying certain fundamental principles that need urgently to be applied to Indian work in the United States."

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Dr. John H. Holst of the Education Division sends us the following observations from a recent field trip:

"While at Tongue River I have had the good fortune to observe the effects of the request of the Commissioner of Indian Affairs for a listing of promising and eligible young Indians in Indian Conservation Work camps for promotion and educational advancement....This week, George LaVatta, the Service Guidance and Placement Agent arrived at Tongue River.....He talked to the camp groups in a most effective way, and to Superintendent, foremen, camp managers, and individual workers, selected the more promising men for special attention and prepared lists which are valid for the intended reference, but have great additional value in that the interviews led the men to see that the camps are really schools and places for testing character and ability....Those who were listed were imbued with new courage, and others were inspired to emulate them and so win approbation and secure deserved opportunities....

"The preparation of these lists and the knowledge on the part of the men that some wise and sympathetic person is taking note of their work and is ready and willing to help them to help themselves will bring out the best that is in them. If this work extends to all the camps in the Service, what an educational service will be rendered! The comprehension of its magnitude grows on the imagination with the realization that it is both practicable and possible. This is education in action."

# PINE BEETLE CONTROL

By J. P. Kinney

Production Supervisor, Emergency Conservation Work

In connection with Indian Emergency Conservation Work attention is being given to the problem of reducing the destruction of timber by Dendroctonus brevicomis and other bark beetles on reservations in the Northwest. During the past decade beetle control work has been carried on at the Klamath Indian Reservation. During most of the period the climatic conditions have been such as to render much of the work ineffective. However, it is probable that the loss from the beetle attacks would have been very much greater if control methods had not been in progress. Abnormally low temperatures during the winter of 1932-33 killed a very large number of the beetles in the Klamath region and the control work is being conducted on a reduced scale.

During the past four years there has been a rather heavy kill of yellow pine trees on the Eastern edge of the forest on the Warm Springs Reservation. This increase in the number of beetles was apparently due to the successive years of drought, and was confined rather definitely to the drier and lower elevations where the timber was of poor quality and of relatively low vitality. In the spring of 1931 a very large amount of merchantable timber on the Yakima Reservation was blown down by an exceptionally heavy wind storm. Efforts to dispose of this timber, or even of a part of it, were unsuccessful. Such disposal would have been exceedingly difficult even in normal times, because of the relative inaccessibility of the timber. The complete demoralization of the lumber industry in 1931 and 1932 prevented any sale of the

timber. It was feared that the presence of such a large number of trees on the ground, with their crowns completely or partially severed from their roots, would result in an epidemic of bark beetles and the anticipated increase in beetle damage has occurred.

## The Prevalence Of The Pine Beetle

Park beetles are nearly always present in a stand of western pine and probably have been engaged in their destructive work for hundreds of years. Indeed, it seems probable that they may have been there as long as the forest has existed. Normally these beetles kill only an occasional tree, or a few small groups of trees, annually, within each square mile of the forest. In fact if the number of trees attacked in any one year in each section, or 640 acres, of forest does not exceed 20 trees, the infestation may be considered normal, or in the endemic stage. In practically every forest of western yellow pine, a few trees are killed each year from attacks of these beetles. Not all the trees attacked by the beetles are killed, for with the vigorous growth conditions that accompany a season of normal precipitation, many of the trees successfully resist attacks and drown the beetles in the pitch that they exude as a means of defense. When trees are weakened through old age, forest fires, or exceptionally dry seasons, they lose their power of resistance and become easy victims for the various enemies that constantly lurk in the forest awaiting their opportunity for successful attack. Then we may have the epidemic stage of beetle attack.

When conditions unfavorable to the trees arrive, the number of trees killed by beetles increases rapidly from year to year until conditions unfavorable to the beetle are encountered again. As weather conditions in the western American States are marked by cycles of wet and dry year, the destruction of timber by bark beetles also moves in cycles. While careful observation and an accurate recordation of conditions has been carried on but a few years, from an observation of stands of pine timber and from several epidemics within the last fifty years, it appears clear that the relatively short cycles of wet and dry years are accompanied by other cycles of 50 or 100 years, perhaps much longer, during which major infestations may occur.

## Method Of Control

The most satisfactory method of control for western pine bark beetles so far developed consists of the felling of infested trees, the peeling of the bark and the burning of the same so as to destroy the beetles and their larvae in the bark. Infested areas are regularly "cruised" before control methods are undertaken. The cruise is directed to the ascertainment of the extent of the infestation and the determination of which areas are to be treated.

The selection of the trees to be treated is called "spotting". This work is usually accomplished in the following manner. Starting at a point five chains from a section corner a compassman runs a compass line back and forth across a section (preferably from north to south and south to north when the sun is bright) and each of the two spotters carefully examines the trees within a strip five chains wide on each side of the compass line, blazing the bark of all trees within such strip that in his judgment should be treated. Thus a strip ten chains wide is covered on each trip through a section and eight such strips must be run through each section. As the compassman proceeds he watches with care the movements of the spotters and places on a large scale map that he carries the relative location and the number of each tree "spotted" for treatment. The compassman sketches on the map the location of streams, drainage gullies, rimrocks, hills and other features that will aid the treating crew to locate at a later time all trees that have been spotted for treatment. This system requires that the compassman run eight miles of line in each section and all trees on a section of 640 acres will have been inspected when the eight strips are completed. Each crew will ordinarily average one-half section in one day in fairly heavy timber.

When the treating crews, of two or three men each, come to a section to carry out work, each crew has a map of the area as prepared by the compassman of the spotting crew showing the location of each tree to be treated. The treaters are equipped with axes, wedges, a cross-cut saw and sometimes special bark peeling tools. The trees are carefully felled so as to avoid their falling into thickets of reproduction or in such manner as to injure other trees or bring the tops into such positions as to create an unnecessary fire risk.

Foresters Peeling Bark to Destroy Pine Beetles, Yakima.

As soon as a tree is felled the treaters proceed to peel the bark from the bole as far up as the beetles and their larvae are found. Such timber will be swamped as may be necessary to facilitate the peeling of the bark. Before the trees are felled large limbs or small logs should be so placed that the trunk of the felled tree will remain slightly above the ground surface. The peeled bark is laid against the peeled tree or under it in such manner as to insure a complete burn and then fires are built every four to six feet along the tree. Since the trunk lies slightly above the ground surface, a good draft usually exists and not only is the peeled bark consumed but any bark on the under side of the trunk that could not be readily removed will be either burned off or so thoroughly heated that all beetles or larvae therein will be killed.

## Control Measures Under Indian Emergency Conservation Work

In the preliminary cruise conducted during September 1933 on the Yakima Reservation, counts of the trees killed in 1932 and of those

Pines Killed by Dendroctonus brevicomis, Yakima.

killed in 1933 were made along strips 10 chains wide, or five chains on each side of the roads through the forest or section lines. The number of trees thus obtained was multiplied by 8 to secure an approximation of the number of trees killed on each section. The results thus obtained were supplemented by sample plots of forest on which a 100% cruise was made. A rather detailed record was made of the conditions found on each sample plot and for purposes of later comparison the location of plots was marked by signs placed along the roads.

Approximately 460,000 acres of the more valuable forest on the Yakima Reservation were examined extensively in such manner as to enable maps to be prepared on which the different parts of the forest could be grouped into five areas of approximately equal insect infestation. The degree of infestation within portions of each of these five distinct areas may vary as much as 50% above or below the average for the said area but the completed map affords a fairly representative picture of the infestation. The heaviest infestation was found in the Cedar Valley area where the elevation is about 2,600 feet above sea level. About 1890 a large area of ponderosa pine was killed in the Cedar Valley territory by a bark beetle infestation. This attack resulted in practically a 100% kill over a large area and affords a clear indication of how destructive such an infestation as now exists may become. It has been estimated that 6% to 7% of the stand of pine in the Cedar Valley area was killed by beetles in 1932. The percentage killed in 1933 was apparently only about one-half of that in 1932. This decline was probably due largely to unusually cold weather in the winter of 1932-33. The fact that groups of vigorous young trees have been killed in 1932 and 1933 shows conclusively the epidemic conditions existing.

The examination of the Yakima forest was made by James D. L. Drake, an experienced forester employed on Emergency Conservation Work. Mr. Drake observed that there were indications of a decline in the attack but recommends a vigorous compaign of control efforts so as to hasten as much as possible the subsidence of the evil.

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## A WORD ABOUT THE SUPERINTENDENTS' EXAMINATION

To the Field Employees:

The examination for agency superintendent which the Civil Service Commission has recently held, has caused some misunderstanding in the field, which I wish to correct. We are trying to get new material for the Indian Service but we are not overlooking the people we have. You may be assured that whenever there is a vacancy we shall first look over the available personnel in our own ranks. Also, I wish to make clear that the technical requirements set up by the Civil Service Commission represent to us only minimum qualifications. We do not assume that anyone who merely meets these qualifications is ipso facto eligible for one of these jobs, whether he is in the Service or not.

JOHN COLLIER

Commissioner Of Indian Affairs

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The Cover Design. The cover design of this number of INDIANS AT WORK is the work of an Indian student, J. Myers, Santa Fe School.

NAVAJO OLD TIME MEMORIES
as told to
FORREST M. PARKER, Assistant, Southern Navajo.

In the winter of 1931 while I was convalescing from an illness, an old Indian named Loco who was cook for J. L. Hubbell for a good many years, called on me to pass the time of day. It was just following a heavy snow during which the Indians lost many sheep. The snow was beginning to melt -- was quite slushy, in fact. Loco was wearing a pair of white man's shoes and his feet were wet. We began talking about the airplanes which were flying over the reservations dropping food to the Indians. He stated that the great trouble with this modern age was that everyone and everything was getting lazy. In years gone by the Indians would build a drive for deer, drive them into this trap, kill what they wanted for meat, then they would turn them out in pairs in different directions, so that they would scatter over the range. They would dry the meat, hang it up in the hogans, save their corn, wheat, pumpkins, and beans, so that when heavy storms like the present one came, they could stay at home and have plenty to eat.

He compared the fine horses they had in those days with the scrawny, lazy ponies they have today. Even the sheep in former days when turned out would go to hustling for food, whereas now they huddle together, starving and freezing unless food is brought to them.

When the snow began to melt, before they would go out as he had done that day, they would kill a goat, use the meat and make moccasins out of the goat skin, with the wool inside. These would keep the feet not only warm, but dry. Had he come to see

me at that time he would have worn goatskin moccasins and his feet would not have been soaking wet as they were by wearing the white man's shoes.

He then went on to describe the valley and country around Ganado. He mentioned that Ganado is named by the Indians "Inuka Entiel," meaning wide reeds, and that this whole valley was covered with a heavy stand of reeds or tules, and there was just a small trickle of water passing through these reeds. He also described the wheat crops they raised in this valley. There is not a vestige of these reeds remaining, and instead of the small trickle of water he mentioned, there is a very large wash, known as Pueblo Colorado Wash. There is no vegetation growing in this valley now, except that which is under irrigation. This is a very clear example of what erosion will do to fertile valleys if allowed to go unchecked.

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# PLANTS SUITABLE FOR USE IN EROSION CONTROL IN THE HOPI AND NAVAJO COUNTRY

By Joseph Howell, Jr.

Forest Supervisor, Indian Service

There has been some difference of opinion among engineers, foresters, and soil specialists concerning the part played by plants in erosion control. Some engineers have claimed that a plant cover is not necessary to control the flow of water, or as a protection when the construction of artificial dams or obstructions is contemplated. The soils experts of the country realize that engineering work is of first importance but they also feel that the best results are obtained when plants are used along with such artificial dams or obstructions.

The difference in opinion seems to be that the plant uses some of the moisture in the soil for its needs and therefore does not permit all of the water to flow downstream. The other side of the question is that, even if plants do use some of the water, they aid stream flow by permitting the water to soak into the soil instead of flowing rapidly away over the soil surface. The amount of water flowing down the stream is reduced to a more regular flow, as is also the difference in the high water mark and the low water mark, or in the "flashiness" of the stream. It is recognized that plants cannot correct all of the ills of erosion but it is maintained by soil experts that they are an agent that cannot be overlooked.

It is a well known fact that certain plants prefer certain types of soils and that on certain soils only certain types of plants are able to exist. The soils found in the Hopi and Navajo Country range from loose, wind-blown sands to tight, alkali clays (adobes). These soils are formed from the existing rocks found, such as the sandstones, shales, compacted

clays, and volcanic materials, such as malpais, and from such older soils as are now being exposed. These last-named were formed under conditions of little rainfall and contain most of the minerals that were in the original rocks or soils. In some cases these salts have collected in large quantities in depressions and in the clay or adobe flats. Besides the minerals necessary to plant life there are some that are harmful in small amounts and some that are harmful only if present in large quantities.

## Types Of Soil In Question

The following salts are usually harmful and form the "saline" or "salty" soils and the alkali soils. Those forming the "salty" soils are table salt (sodium chloride), Epsom salts (Magnesium sulfate), Glauber's salts (sodium sulfate) and nitre (sodium nitrate), as well as many others of minor importance. Those forming the alkali soils are sal soda or washing soda (sodium carbonate) and baking soda or saleratus (sodium bicarbonate). The saline salts prevent plants from growing by taking the water away from the plant; that is, a saline soil is dry to plant roots. The alkali salts "burn"the plants or cause the soil to become physically unfit for growth. The amount of salt required to produce these effects varies greatly, as only small amounts of soda are needed to prevent growth, whereas large quantities of table salt are needed to produce any effect. The most peculiar fact about the soda salts is that the difference between the amount necessary to increase the growth of plants and that which will kill plants is very small.

The alkaline and saline soils are generally found along the washes or in depressions where water has had a chance to accumulate or continue to collect. These soils may be recognized by the white powder that appears on the surface after wetting or by the type of vegetation present.

## Types Of Forage Possible On Alkaline Soils

Alkaline soils are generally covered with chico (greasewood), some bluestem wheatgrass, alkali drop seed, or shadscale. In this country chico is the best known. It furnishes excellent forage when care is taken not to overgraze the area. It may be that this is the plant to encourage on the eroded alkali flat lands instead of the Russian thistle which is now so much in evidence. The two grasses mentioned can be used with the chico in restocking the alkali areas. This combination will provide excellent protection for these areas as well as provide excellent forage for livestock. In some places it may not be possible to grow these plants and as a last resort shadscale might be tried. This low bush grows on heavy clay flats where little other vegetation is able to exist. It produces a good forage crop when moderately grazed and is a good soil protector. All of the above plants are extremely drought-resistant.

## Types Of Forage Possible On Saline Soils

The salty soils or saline soils may bear the same vegetation but there are other plants that determine such areas and furnish large amounts of stock feed. Chamiza or saltbush covers large areas of salty soils in this section, furnishing large quantities of high grade forage. The seed from this plant is readily eaten by animals; new plants, therefore, cannot be produced under heavy grazing; the plant itself is brittle and does not withstand more than moderate grazing. Winter fat, another excellent feed, tends to produce best on salty soils. It is regretted that this plant is not prolific, since it is an excellent fattener. Giant rye grass and the various drop seeds grow well on salty soils, producing quantities of excellent forage. There are many other plants that may be used but the above are the most suitable for our work.

The most prominent plant at present on salty and slightly alkaline soils is the Russian thistle. This plant is capable of withstanding the conditions of such soils, produces much seed, and is not eaten to any great extent by stock. Aside from the above characteristics it is not a good soil binder. This is due to the fact that the stand is open; that is, the plant does not give the ground much cover, and is not present at all times of the year, especially when most needed. This is due to the fact that it breaks up when dry and blows away, thus exposing the soil surface to the high winds and to running water. This plant is taking the country but at the best is little more than a pest. It can be eliminated by reseeding and proper range management.

## Other Soils

There are two types of soil that have as yet not been mentioned, these are the sweet or neutral soils and the sour or acid soils. The sour soils are rarely found in this region, since they, unlike the salty and alkali soils, are formed under wet conditions. A few areas of this type may be found but are of little concern.

The sweet or neutral soils are extensive and form a greater part of our area. These soils contain all the elements of plant food necessary for growth and are generally very fertile; the only drawback in this country is the lack of adequate moisture at the critical periods. Generally the spring of the year is dry with high, drying winds. This one factor alone reduces the active growing season to a great extent. The plants suitable for such soils and for such conditions are many and varied, the choice will lie with those most adapted to the local conditions and to those that will produce a high quality of forage.

In the loamy and sandy loam soils - that is, those that are not too loosely combined - the blue grama is the most suitable for use in this section. It is readily adapt-

able to the soil and climate, forms a mat which effectively binds the soil, produces large quantities of the highest grade of forage, and produces large amounts of seed. In the loose soils and sands this plant does not do so well but it may still be used. It is better to mix it with sand drop seed or sand muhlenbergia. The sand drop seed is preferred since it produces good forage. The sand muhlenbergia produces a very inferior forage but is well adapted to the adverse conditions present in the loose sands. Besides these grasses there are many more which are suitable to the conditions and which produce good forage.

## Other Forage Plants

Besides these grasses, saltbush will grow on many of the above soils. Usually it is driven out by grasses; however, it would be best to plant some in mixture with the grasses to reestablish it in all parts of its range. It is a valuable plant. Mixing it with grasses would give a variety to the forage and act as an overstory for soil protection. Common sagebrush may be used instead of saltbush on favorable sites. This plant is not high in forage values but does give the soil additional protection. Blue grama produces heavy stands in the sagebrush type. Care must be taken that sagebrush is not seeded on alkali or saline soils, or upon shallow soils. Only the deepest, sweet soils seem to be suited to this plant.

In moist soils, such as in wash bottoms, willow cuttings could be planted to an advantage. Cuttings should be made in the fall for spring planting and well buried in moist sand until needed. Cuttings from growth older than one year are best. These need be only about one foot in length. Such cuttings will root quickly, grow rapidly, and produce some forage of value to livestock.

## Reasons For Soil And Forage Study

In the seeding and planting program attention must naturally be given to the type of soil present and to its characteristics. There will then be fewer failures from this cause. Drought is a factor that cannot be controlled and so must be avoided if possible. The control of livestock must be undertaken in order to give the new plants a chance to become established. Seeding and planting of native species is expensive but is generally worth while in a badly eroded and depleted range.

Difficulty will be had on some areas in establishing these plants. This may be due to the "rawness" of the soil. It may not be in a condition to promote the best growth of plants. Soil is not the same throughout, but becomes less productive with depth, not due to a lack of minerals but to a condition that exists in the soil layers. When erosion takes this surface soil the best part is removed and to regain fertility the soil must be permitted to weather; that is, the soil must undergo such changes as nature alone can make in order to prepare

the raw materials for use. To aid the soil the surface obviously must be protected from washing. Plants are able to help in this matter and are also able to assist nature in rebuilding the surface layer of the soil.

## Points To Be Observed

To restore the forage production of an area as well as to protect the soil the following points must be observed.

1. Maintain a complete cover of plants.
2. Regulate grazing to nature's balance.
3. Prevent further washing by artificial dams and obstruction.
4. Reseed areas lacking cover, either artificially or naturally.
5. Above all observe the rules of the balance of nature.

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Mr. Charles Francis Jenkins of Philadelphia, Pa., renowned Bibliophile, sends the Indian Office the following letter:

"I want to say how much I am enjoying the publication from your bureau on "Indians at Work". It is an excellent idea and gives the many friends of the Indians a chance to know what you are doing, greatly stimulating their interest and if possible their cooperation. Funny no one ever thought of it before!"

Indians Snaking Logs, Crow Reservation. ECW Project.

Indian Truck Drivers, E. Cherokee, Emergency Conservation Workers.

Indians Setting Telephone Poles. Fort Hall, ECW Project.

Indians On ECW Water Development Project, Cheyenne River.

Indians Building Truck Trail, ECW Project, Hoopa Valley.

Indians At Roll Call, ECW Camp, Pine Ridge.

Indian Rodent Control Crew, Leupp. Indian Emergency Conservation Workers Have Treated 985,070 Acres For Rodents On Various Reservations.

Indian Emergency Conservation Work Crew On Soil-saving Dam, Chilocco. Over Two Hundred Such Dams Have Been Built As ECW Projects.

Masonry Dam To Check Gully Erosion Built By Osage Indians. An Indian Emergency Conservation Work Project.

## INDIAN ROADS UNDER PUBLIC WORKS

Better progress is being made at present in road construction than has ever been attained before in the history of the Indian Service, even though this activity has been made subordinate to our Emergency Conservation program. Delay in obtaining road machinery, particularly road graders, has also prevented the expansion of road projects to the fullest possibilities. However, it is expected that our requirements of machinery will be fullfilled before January. We have endeavored to comply with the spirit of the law in keeping the expenditures for machinery as low as possible, consistent with reasonable economy and public advantage. Our expenditures and authorizations for machinery approximate ten percent of our entire appropriation for road work. This, we feel, is creditable in view of the fact that the Service had but little road machinery on hand to inaugurate a road program on the scale contemplated.

Great stress is being placed on the importance of proper location of roads, both from an engineering and economic standpoint. The wishes of the Indians and their needs are of paramount importance. In this, school roads, of course, are given preference.

Funds have been allotted to 78 Superintendents for road work. Six district Road Supervisors have been appointed to advise and assist the Superintendents with their road programs. The Secretary also approved the appointment and assignment to reservations of 40 road engineers. In addition, all Superintendents were authorized to employ the necessary number of sub-foremen, mechanics, and machine operators. Employment in supervisory positions has been restricted in order to keep the "overhead down". Only four people are employed in the Washington Office to handle the road construction activities of the Indian Service.

The Superintendents have been too busy to report the total number of Indians employed on road work. However, a few reports from representative Agencies indicate that there are approximately 4,500 Indians now at work on road improvements. By rotating jobs, the number of individual Indians employed probably exceeds 12,000.

It is the earnest hope of the Office that another substantial allotment of funds can be obtained to continue our road program into the next fiscal year. Estimates based on Public Works - Roads Circular No. 10 are being received, which can be used as a basis of our appeal.

The Secretary has approved our request for funds with which construction work may be undertaken on certain special projects. It is understood that the request is now before the Public Works Administration for consideration. Should this money be provided, it is expected that much of the work will be under the general direction of the Bureau of Public Roads.

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## A WORD OF APPRECIATION

The Office desires to convey to the workers in the Field an expression of gratification for the splendid cooperation recently given in the program for the betterment of our land administration.

Our study developed the fact that we had no adequate record from which to determine the present status of Indian-owned lands, especially as to whether they were held by original allottees or in an heirship status; and it was considered especially desirable to have this information in graphic form as well as in detailed tabulation. The only source from which accurate information of this nature could be obtained was the Field workers; and a request for it was sent out.

The response was splendid. Although the preparation of these reports entailed an interruption and partial cessation of routine work, and in many cases considerable overtime work on the part of the Field workers, the reports were compiled, the maps were prepared, and we now have detailed information which will be invaluable in the preparation of a comprehensive program for conserving and salvaging Indian landed assets.

The splendid response from the Field is sincerely appreciated by the Office.

## PRODUCTION PICTURES

Making The Missouri Work At Pierre School. Our project involves the building of three jetties along a mile course on the current side of the Missouri River touching the school farm. It involves river bank clearance and the collection of diking materials - brush, weeds, rock and so forth. All refuse matter scattered about the farm and river bank will be thus utilized. Progress Report.

A Special Problem At Sac And Fox. We have neared completion of a strong spring which will serve five Indian families. Laid a brick wall through a six foot layer of quicksand, which presented a special problem. Russell E. Getty, Production Supervisor.

A "Bug" Plot At Spokane. A crew worked one day on the task of laying out a "bug" plot. The insect-infested trees in this plot were charted on a map for the purpose of checking the destruction of the yellow pine. C. E. Coombs, Jr., Camp Manager.

Indians And White Men At Fort Yuma. The following is a report of employment of men paid from Emergency Conservation funds for the week ended November 11:

2 White Foremen.....$ 40.50
61 Indians..... 567.00

The force paid from this appropriation are working on the control and extermination of Johnson grass on the Yuma Reservation. The entire area infested with this grass has been covered and the grass chopped and burned, thus destroying the seed and preventing the spread of the pest during the present year.

The men are now engaged in building embankments on badly infested land, flooding the plots and keeping them under water about eighteen inches deep. Most of the Johnson grass will be killed by this method and what remains can be exterminated by digging up the roots. This method is only used when land is very badly infested, so that digging up by the roots would not be practicable. H. B. Jolley, Superintendent.

Indians At Western Shoshone. All foremen and all workers are Indians. We had one tractor driver and one production manager that were white men. We have twenty-one working now. We have cut 10,000 fence posts for use in the spring. E. M. Neilly, Superintendent.

Range Improvement At Cheyenne River. The three rodent control crews treated in their districts approximately 34,792 acres for prarie dogs. Representatives of the Biological Survey stated that a good kill had been made.

Twenty-four stock dams have been completed on the Reservation. All are constructed with rock-laid spillways and earth fills. They are placed over the entire grazing area of the Reservation, no two being closer than three miles apart.

Three springs have been developed at different points on the Reservation, affording good drinking water for public use. A road is being constructed to each spring. Tests of the water have been made, insuring health protection.

Seventy-eight miles of telephone line have been put up.

There is no doubt whatever that the building of the resevoirs and dams in the grazing areas of the Reservation has enhanced the value of the range land to a considerable extent. The Indians here were in the utmost distress on acco[illegible]

of the drought and grasshopper plague, which destroyed all their garden and field crops this season. The Emergency Conservation Work has been a God-send to them. We were unable to purchase subsistence supplies for them and they were glad to take advantage of the work offered. W. F. Dickens, Superintendent.

Plantings At Red Lake. Planted ten white pine seed beds; and, for landscape purposes transplanted twenty spruce five to eight feet in height from the forest to the nursery. Richard Delaney, Group Foreman.

Twenty Thousand Acres At Ten Cents An Acre At Standing Rock. It is interesting to note that as a result of building dams more than 20,000 acres have already been leased at 10 cents per acre. This land has never heretofore produced a dollar. A great many inquiries are now being received at the Agency with regard to leases and it is believed that a very substantial acreage affected by these dams will be rented before spring. J. H. Mitchell, Supervisor.

Emergency Conservation Work At San Carlos. One spring finished and two others worked on by our crew. Good progress on Lookout Road, Cienaga Corral tank finished adding greatly to the value of the range. Horse pasture at Garden Creek under construction. Work on Little Troughs Road progressing nicely. Post cutting camp may close next week having secured all posts needed for this district, or may work all winter, weather permitting, to supply other districts with cedar fence and corral posts. K. A. Ebright, Group Foreman.

A Main Spring At Pechange, Mission Agency. Work on the main spring is producing more water. The flow now is about fifteen gallons per minute, with indications that it will increase. E. A. Wehr, Group Foreman.

Completed Work At Chilocco. Conservation Work began here in August with twenty men. Now we have eighty men, representing about fourteen tribes. We also use about twenty-three teams of horses and mules. Our four group leaders and four assistant leaders are Indians.

The following figures show the projects which we have completed:

| | |
|---|---|
| Erosion control measures | 500 Acres |
| Brush dams | 1003 |
| Masonry dams | 26 |
| Pole dams | 6 |
| Earth soil-saving dams | 4 |
| Diversion dams | 35 |
| Spillways | 3 |
| Road construction (gravel) | 1/4 Mile |
| Revegetation | 20 Acres |
| Stream improvement | 4 Miles |

I do not believe that in any crew of workmen there is better harmony or cooperation shown than among my co-workers. They are very diligent and conscientious and seemingly happy in the performance of the tasks assigned to them. Alex B. Pombogo, Group Foreman.

A Small Dam At Consolidated Ute. A small dam has been completed on a side arroyo. It should back up silt to a depth of eight feet and should benefit approximately fifty acres. E. W. Parry, Engineer.

Forward At San Juan Pueblo. Now that we have fenced our land we must work some reservoirs. I have sighted in two places, I think they are in a good place. Sotero Ortiz, Group Foreman.

## CAMP NOTES

School For Foremen At Hoopa Valley. A school for foremen has been started here under the direction of Mr. Leonard B. Radtke. All the production foremen are attending. John M. Lindly, Camp Manager.

Interest In The Leader Camps At Tongue River. Since receipt of the October 15 issue of INDIANS AT WORK several men have made bids for placement on the contingent to the leader camps in Arizona this winter. It is pleasing to note the aroused ambitions. It is believed that most of these men would readily qualify for important positions if they were given experience among people outside the reservations. For the most part these boys lack experience to go along with their elementary education. It would be splendid if they could join fellow Indians from other reservations and come in closer contact with progressive and experienced leaders. Donald O. Nye, Camp Manager.

Work Training At Colville. One of our aims, in accordance with the general Indian Emergency Conservation Work plans, has been to train Indians to fill the more responsible positions. The forest is the dominant natural resource of this area, and so the woods' work is an important source of livelihood for the Indians. In this connection we have trained three Indians to act as scalers. Ten others have had both instruction and training in bridge building, one being trained as a broad-axe man. Two others have been trained as carpenters, one as a harness maker. Two have been given instruction and practice in horse shoeing and three in engineering reconnaissance work. Two of our foremen and two of our straw bosses are likewise Indians. Another has been given instruction and practice in grader work and two in using the caterpillar and tumblebug. J. Allen Tower. Camp Manager.

Two Meetings At Makah. We had two meetings this week. The first was with the entire Indian Emergency Conservation Work organization. I endeavored to outline to them in a short talk the various objects of the program and pointed out particularly the desire of the present administration to help the Indian to help himself. I pointed out how this was being worked out here, and emphasized that, while there might be criticisms of individuals and procedures, if the right leaders were not immediately chosen, the natural leaders would come to the top.

The second meeting of the week was for those in the foremanship group, those receiving extra compensation because of special work and ability. To those boys I outlined the Indian Emergency Conservation Work leader camp idea and what it should mean. I also read them some of Commissioner Collier's editorials to give them the background of his thought. Progress Report.

Weekly Events At Fort Belknap. Thursday nights at the camp here are fast becoming one of the weekly events to be looked forward to in the Hays and Lodgepole districts. Indians come in wagons, buggies, on horseback and in automobiles for a few hours entertainment - entirely amateur, but enjoyed as much as if professional. Guitar solos, cowboy songs and dancing have been the highlights of the evenings, after which Cook Rusch and his crew serve cake and coffee. Other evenings in camp are spent in reading, checkers, pingpong and cards. A collection of National Geographic Magazines would be very much appreciated. James B. Ring, Camp Manager.